Supplemental file 1 FSA NPS score computation at food/beverage level

Points are allocated according to the nutrient content for 100g of foods or beverages.
Points are allocated for 'Negative' nutrients (A points) and can be balanced according to 'Positive' nutrients (C points).

A points
Total A points = (points for energy) + (points for saturated fat) + (points for total sugar) + (points for sodium)

Points	Energy (kJ)	Saturated Fat (g)	Total Sugars (g)	Sodium (mg)
0	≤ 335	≤ 1	≤ 4.5	≤ 90
1	> 335	> 1	> 4.5	> 90
2	> 670	> 2	> 9	> 180
3	> 1005	> 3	> 13.5	> 270
4	> 1340	> 4	> 18	> 360
5	> 1675	> 5	> 22.5	> 450
6	> 2010	> 6	> 27	> 540
7	> 2345	> 7	> 31	> 630
8	> 2680	> 8	> 36	> 720
9	> 3015	> 9	> 40	> 810
10	> 3350	> 10	> 45	> 900

C points
Total C points = (points for fruits and vegetables) + (points for fibers) + (points for proteins)

Points	Fruits, Vegetables (%)	Fiber (g) *	Protein (g)
0	≤ 40	≤ 0.7	≤ 1.6
1	> 40	> 0.7	> 1.6
2	> 60	> 1.4	> 3.2
3	-	> 2.1	> 4.8
4	-	> 2.8	> 6.4
5	> 80	> 3.5	> 8.0

*FSA score allocates different thresholds for fibers, depending on the measurement method used. We used NSP cut-offs to compute fibers score.

Overall score computation
- If Total A points <11, then FSA score =Total A points − Total C points
- If Total A points ≥11,
    - If points for fruits and vegetables =5, then FSA score =Total A points − Total C points
    - Else if points for fruits and vegetables <5, then FSA score = Total A points − (points for fiber + points for fruits and vegetables).

For 100g of a given food, the percentage of fruits and vegetables is obtained by summing up the amount (in grams) of all fruits, legumes and vegetables (including oleaginous fruits, dried fruits and olives) contained in this food.

Exceptions were made for cheese, fat, and drinks to better rank them according to their nutrient profile, consistently with nutritional recommendations:

Score computation for cheese
For cheese, the score takes in account the protein content, whether the A score reaches 11 or not, i.e.: FSA score =Total A points – Total C points

Score computation for fat
For fat, the grid for point attribution is based on the percentage of saturated fat among total lipids and has a six-point homogenous ascending step, as shown thereafter:

Points	Saturated Fat/Lipids (%)
0	< 10
1	< 16
2	< 22
3	< 28
4	< 34
5	< 40
6	< 46
7	< 52
8	< 58
9	< 64
10	≥ 64

Score computation for drinks
For drinks, the grids for point attribution regarding energy, total sugars and fruits and vegetables (%) were modified. The attribution of points for sugars takes into account the presence of sweeteners, in which case the grid maintains the total sugar score to 1 (instead of 0).

Points	Energy (kJ)	Total Sugar (g)	Fruits, Vegetables (%)
0	≤ 0	≤ 0	< 40
1	≤ 30	≤ 1.5	
2	≤ 60	≤ 3	> 40
3	≤ 90	≤ 4.5	
4	≤ 120	≤ 6	> 60
5	≤ 150	≤ 7.5	
6	≤ 180	≤ 9	
7	≤ 210	≤ 10.5	
8	≤ 240	≤ 12	
9	≤ 270	≤ 13.5	
10	> 270	> 13.5	> 80

Milk and vegetable milk are not concerned by this exception. Their scores are computed using the overall score computation system.